



Portable Maintenance Assistant (PMA)

An Overview of NAVSEA Pilots



**February
2002**

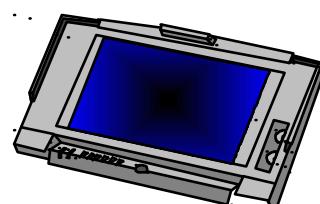
**Kisan Pandit
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NAVSEA 04M

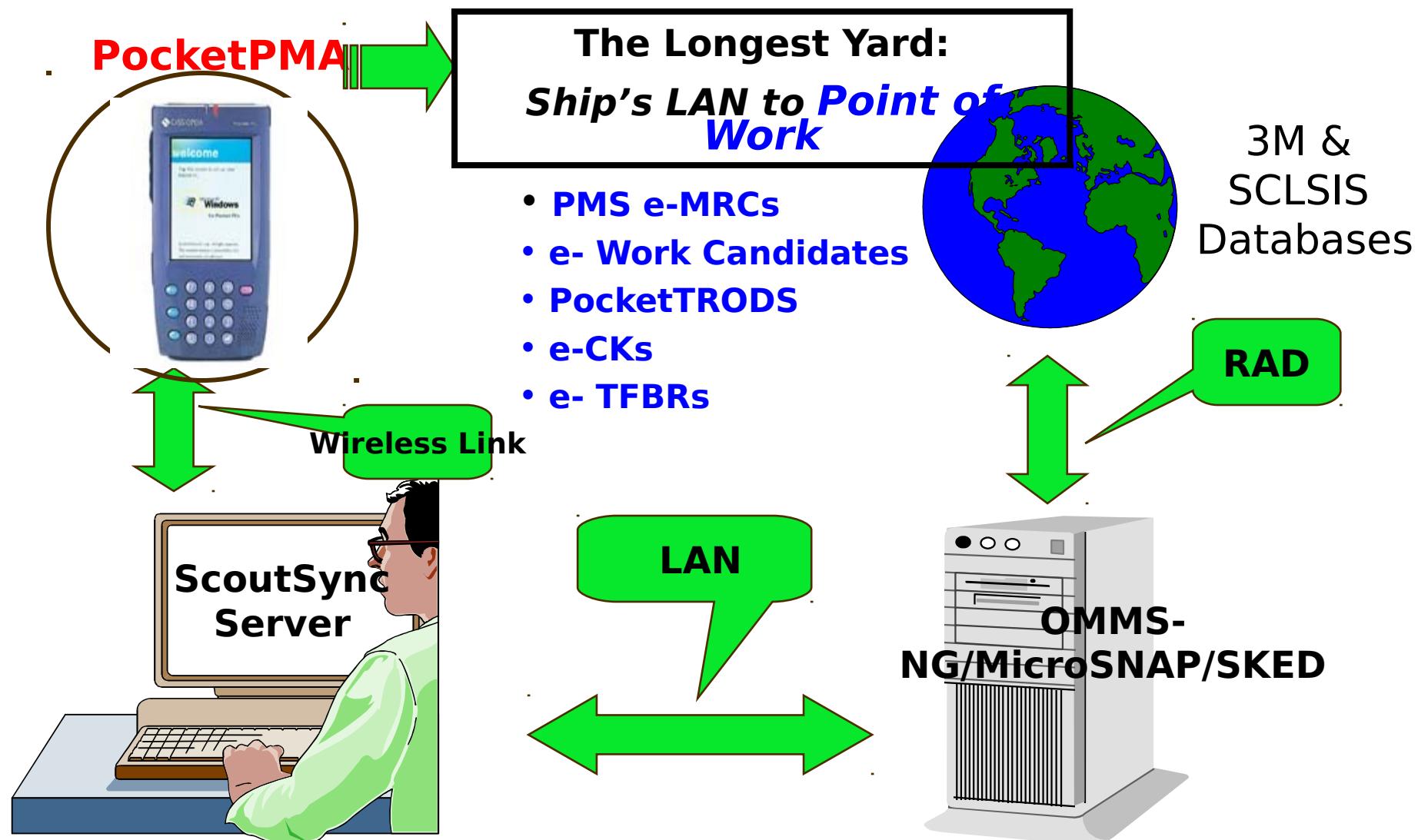
Portable Maintenance Assistant (PMA)

An application of mobile computing for paperless maintenance and In Service logistics

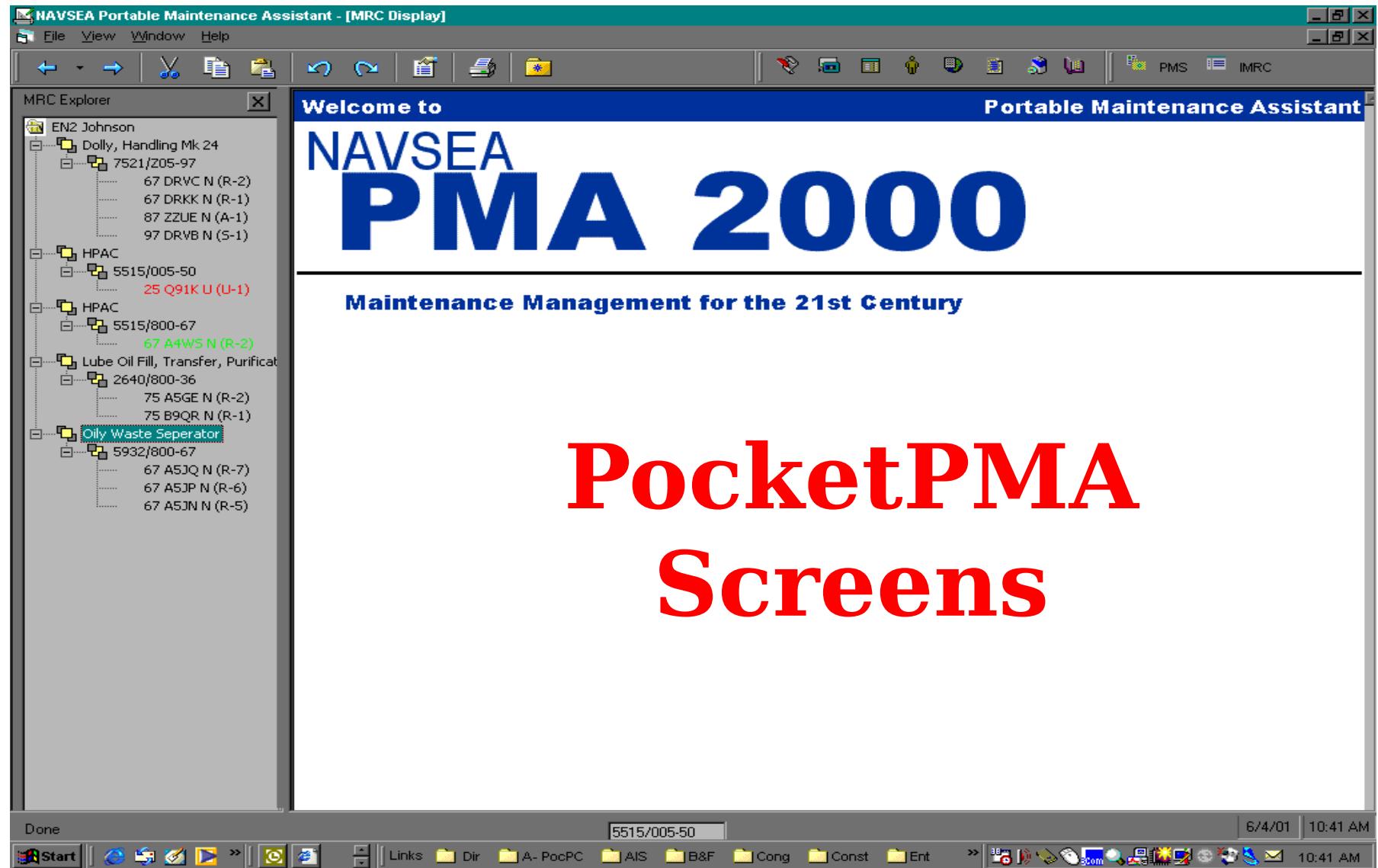
- **Purpose:** **IMPROVE PROCESS EFFICIENCY** by providing user friendly paperless tools for executing preventive and corrective maintenance at the point of work.
- Functions supported include digitized data collection, e-feedback reports, smart queries for logistics data, diagnostic & troubleshooting capability, e-work candidates (4790/2K & CK)
- Data transfer capability using “IR” or wireless interface via ship’s LAN to ship’s OMMS-NG / MicroSNAP / SKED
- Benefits:
 - Workload Reduction, Paperless maintenance management and digitized data collection
 - Captures maintenance requirements (4790/2K & CK) at point of work
 - Improved access to ship’s infrastructure using wireless capability



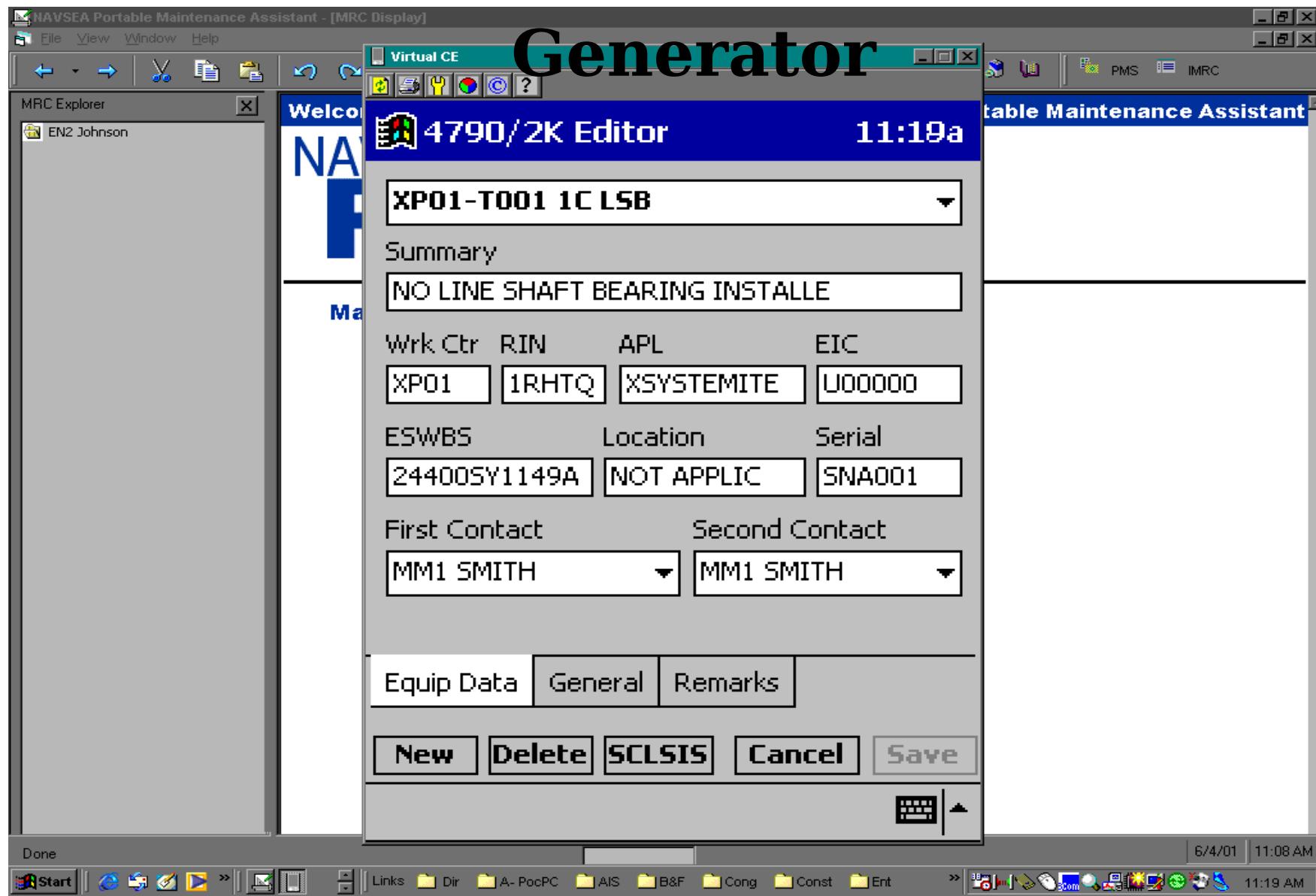
Pocket Portable Maintenance Assistant (PocketPMA)



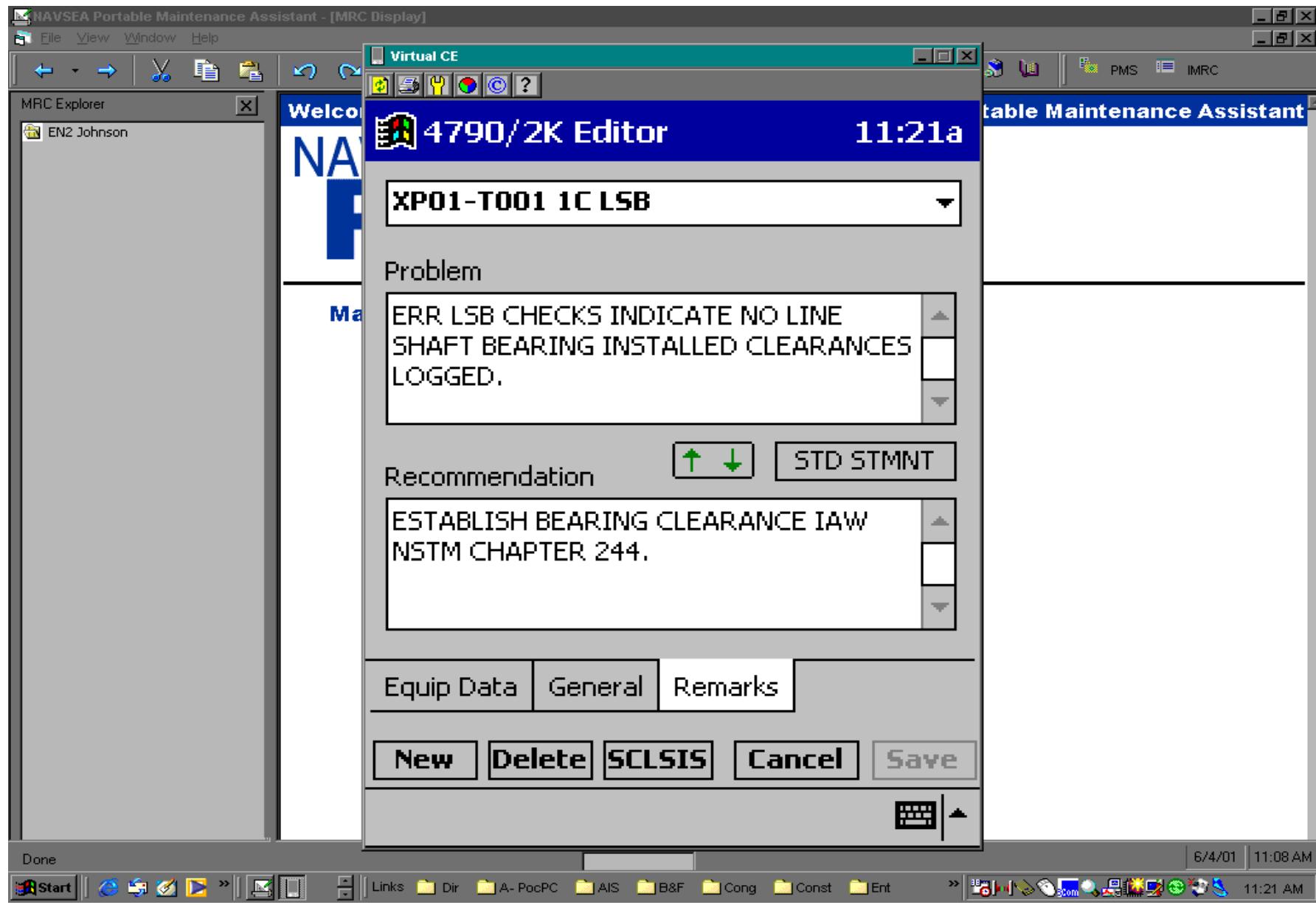
An application of mobile computing for paperless maintenance and logistics



PocketPMA Configuration Linked Work Candidate Generator

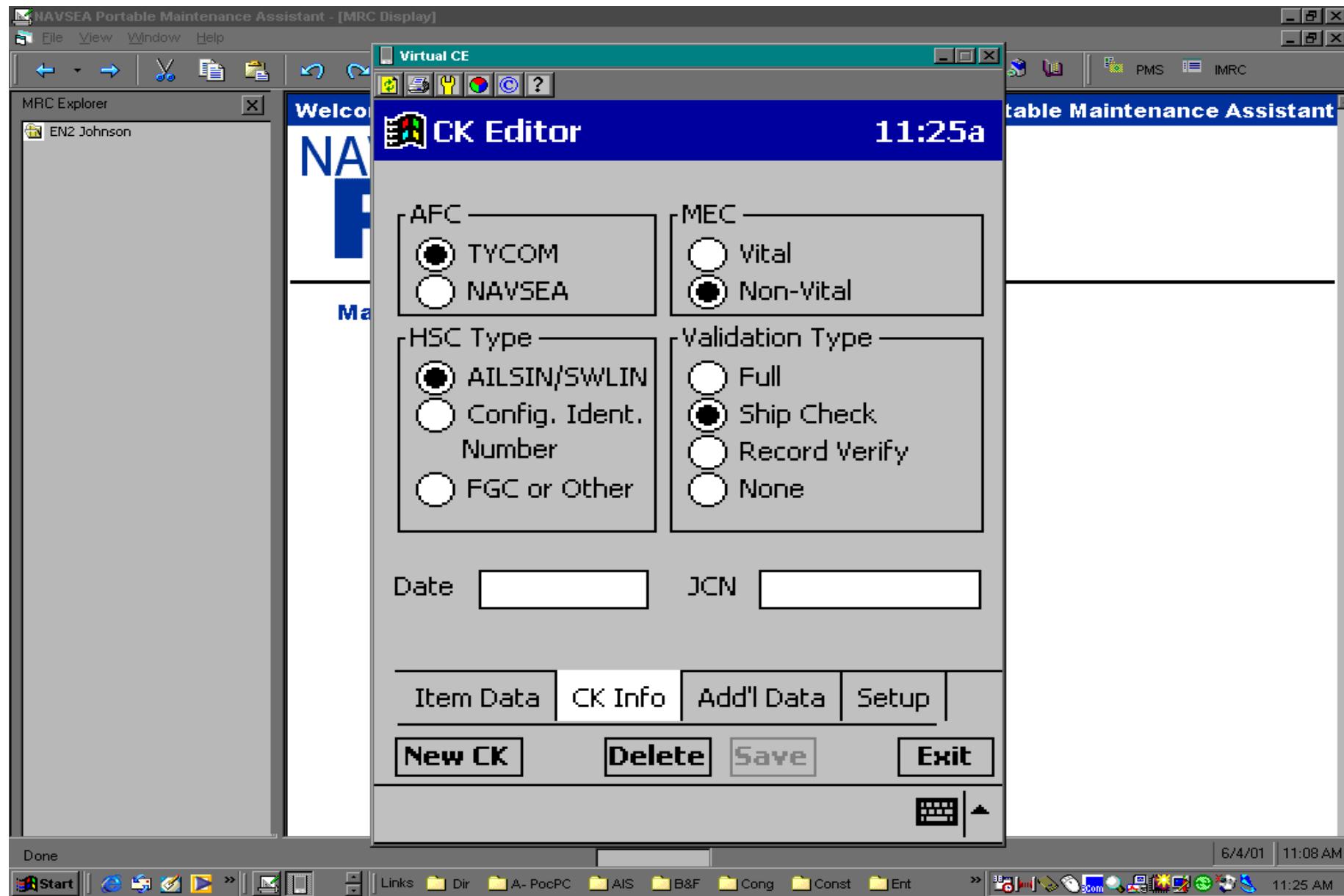


PocketPMA Work Candidate Standard Statements

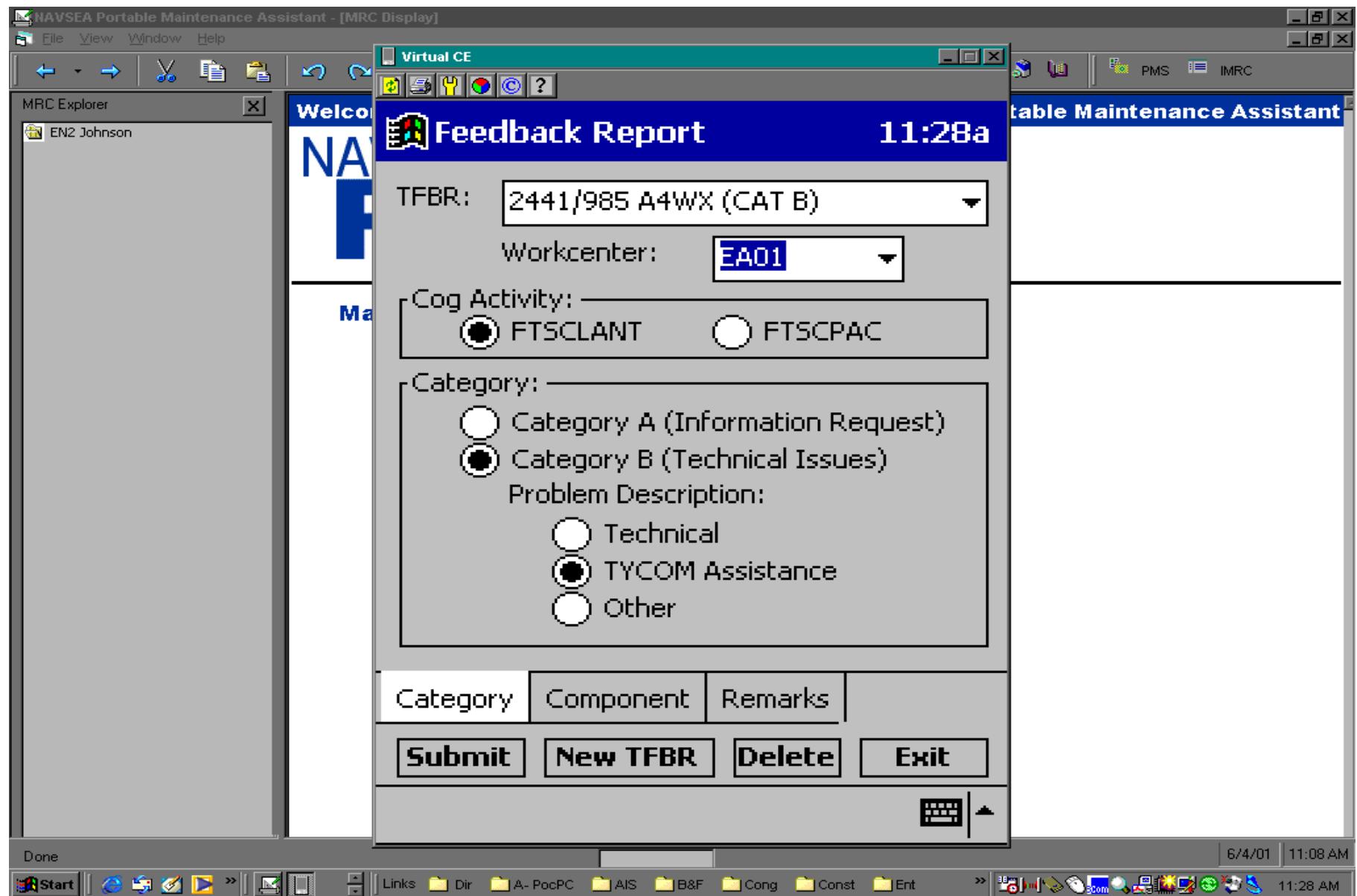




PocketPMA CK Form



PocketPMA Feedback Form





Summary

PMAs is a tool for :

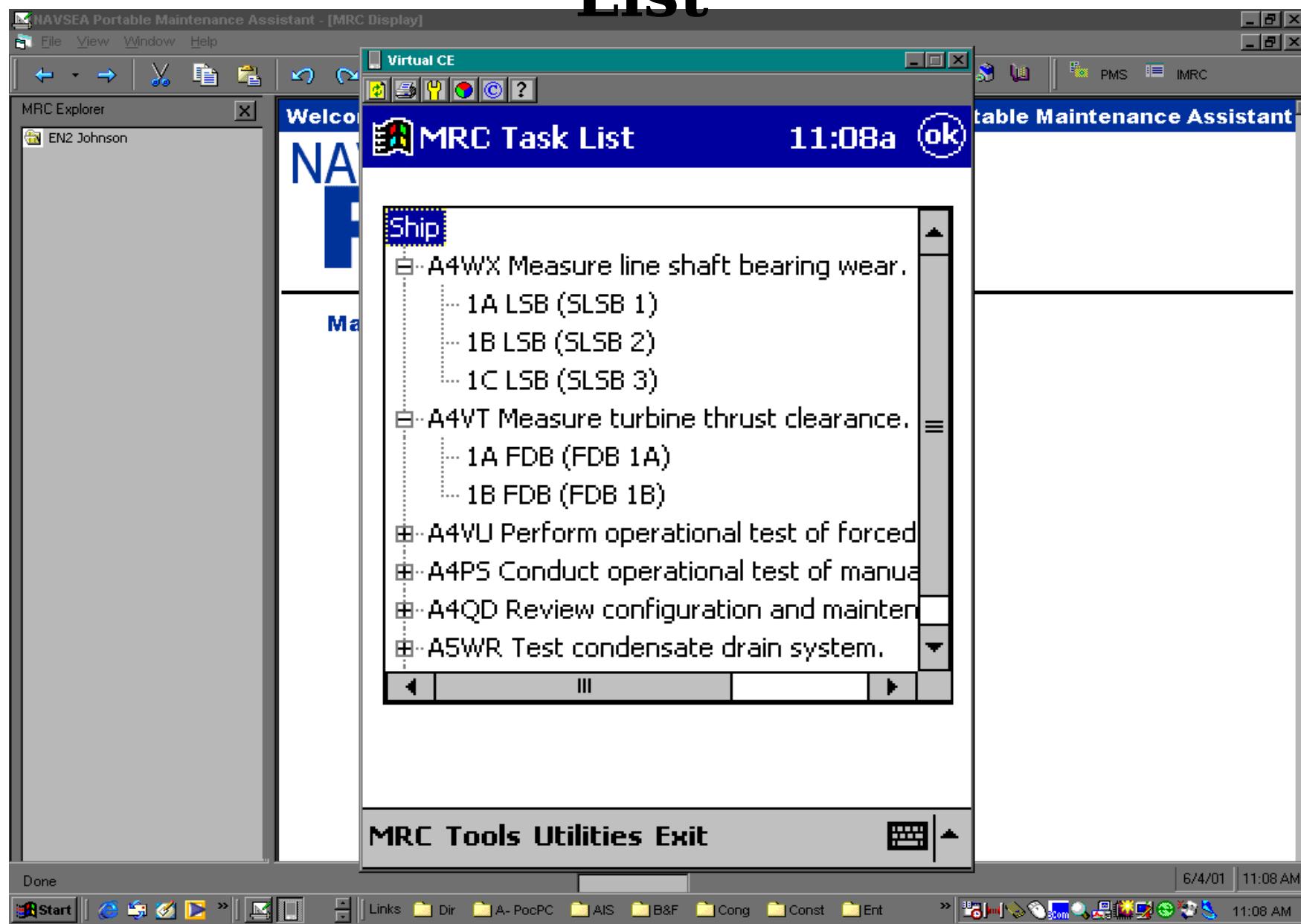
- Reducing Shipboard Workload by
 - eliminating paper based processes
 - Improving quality of 2Ks, CKs and Feedback reports
 - delivering “smart” in-service logistics data
- Providing diagnostic and troubleshooting capability at the point-of- work
- Using Wireless technology to reduce wait time and improve access to shipboard resources

URL for PocketPMA Tutorial :
<http://www.icesd.com/pvtools>

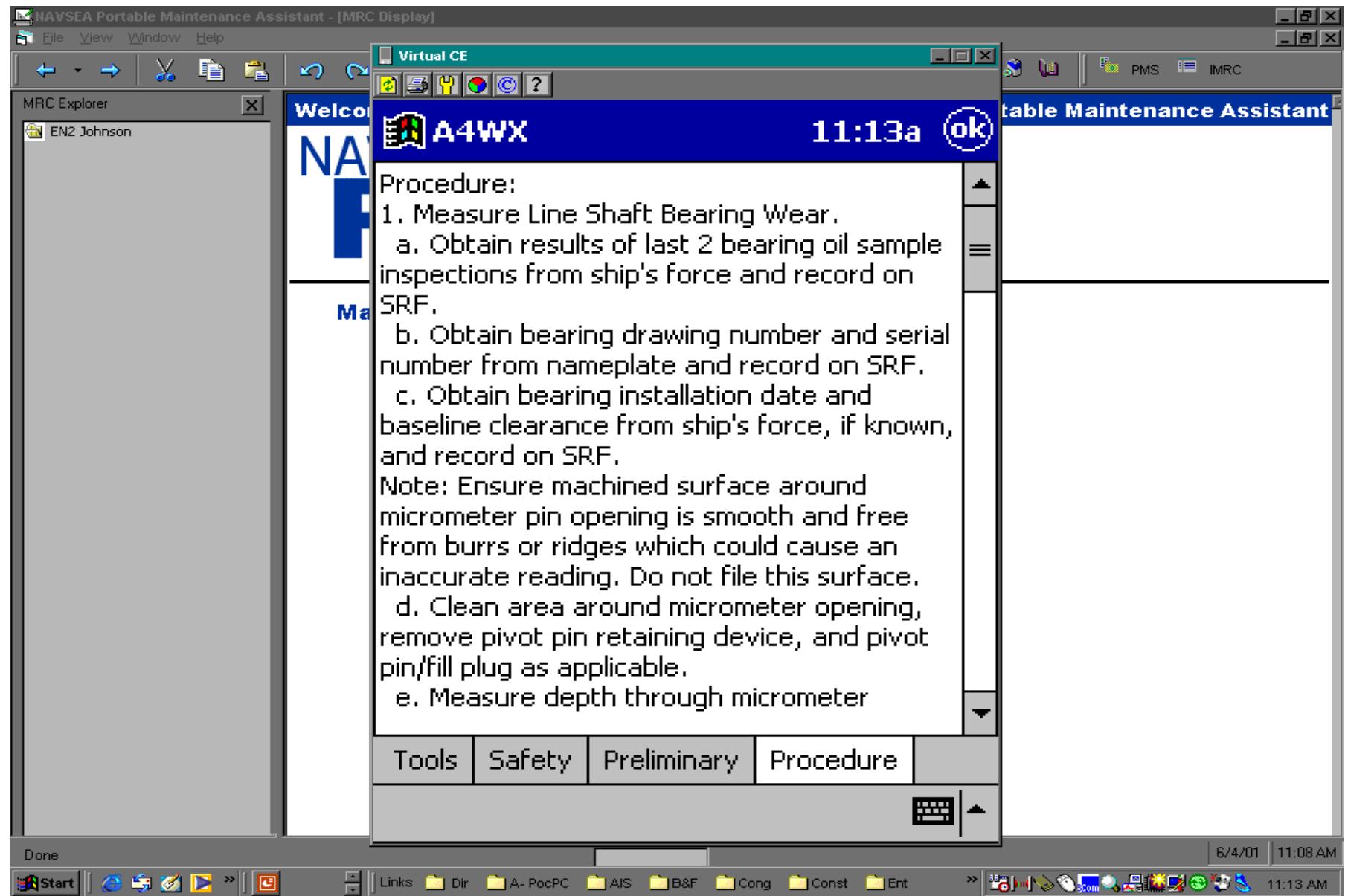


Back up

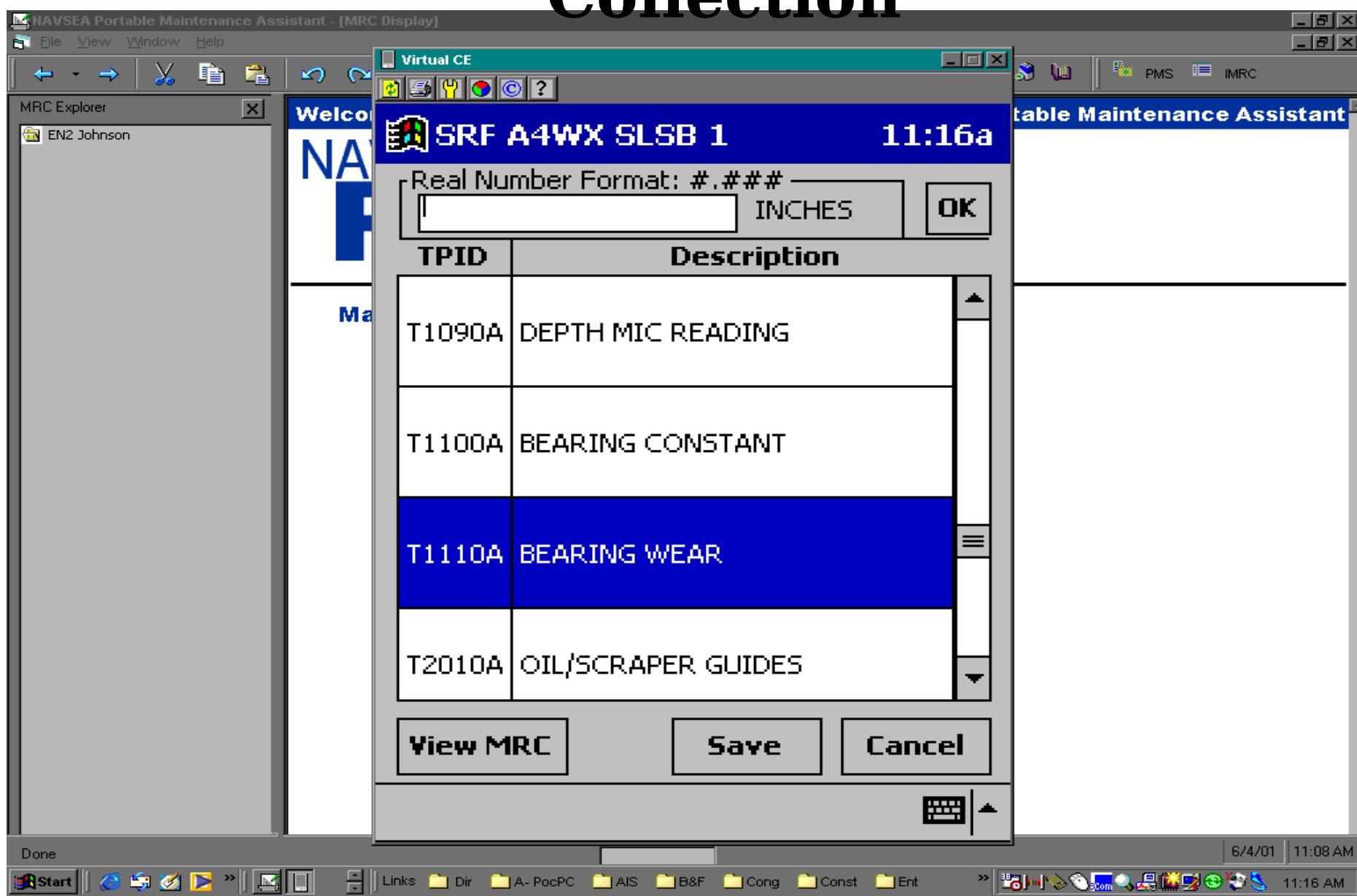
PocketPMA MRC Task List



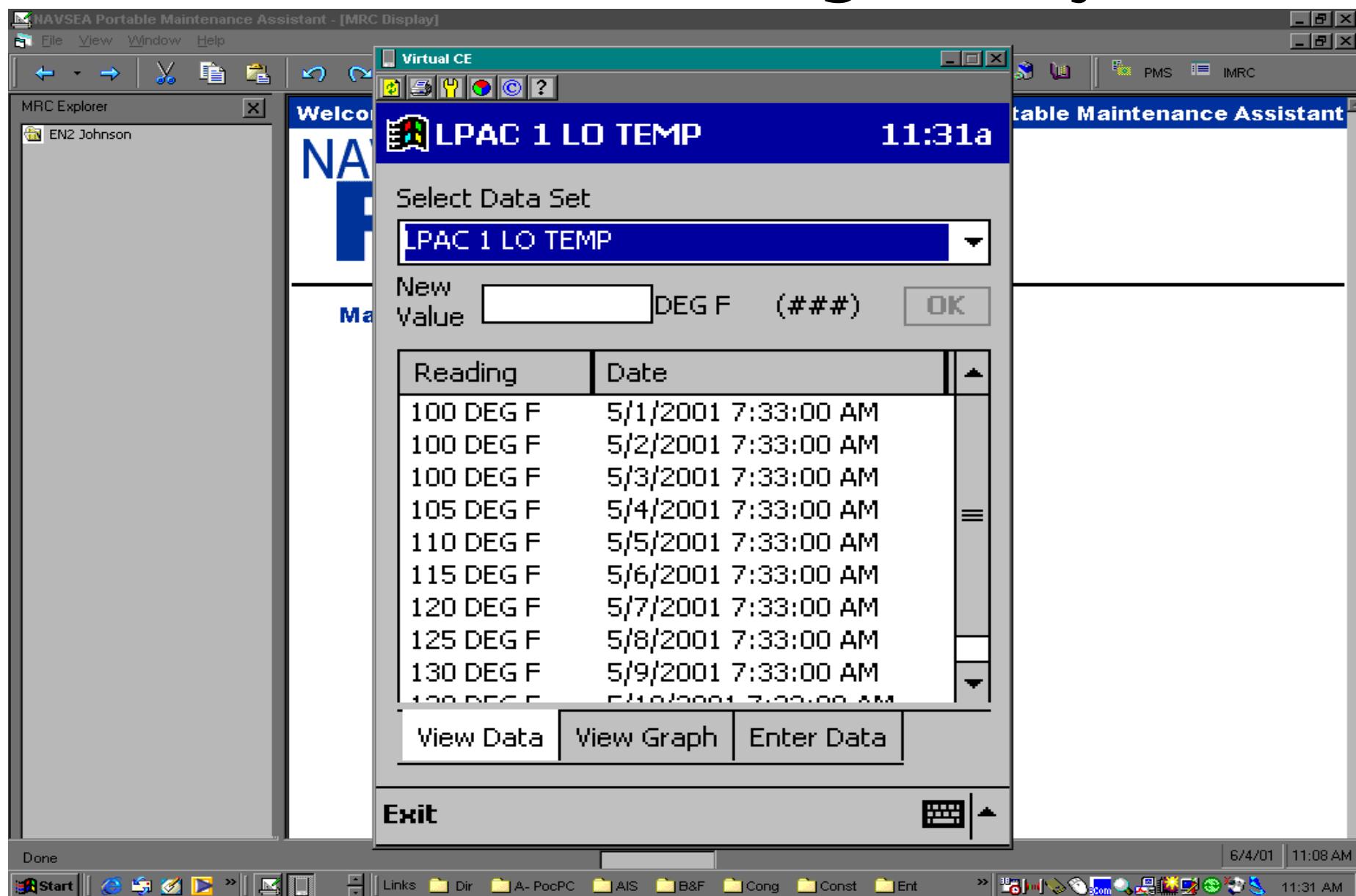
PocketPMA MRC Screen



PocketPMA MRC Data Collection

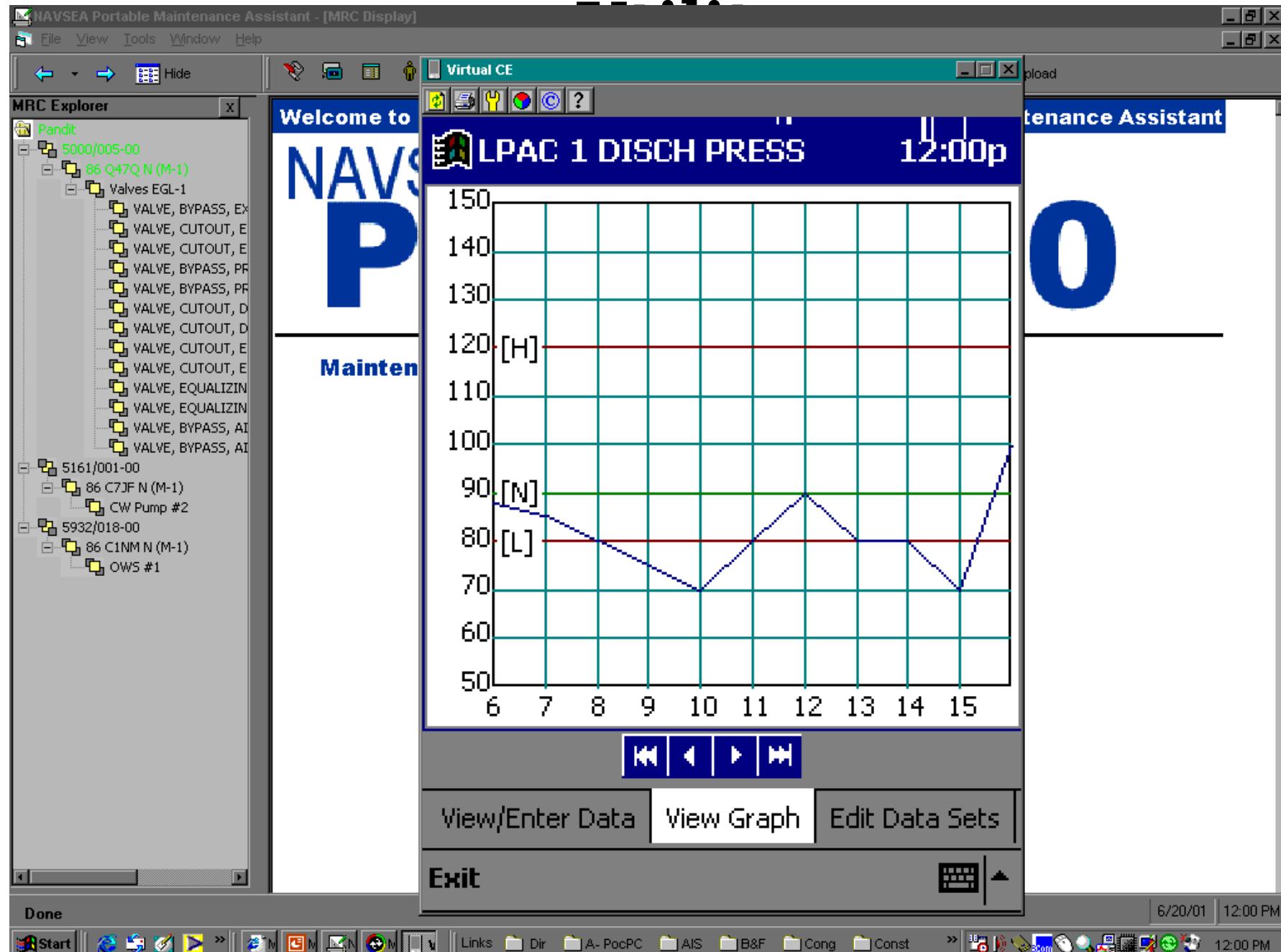


PocketPMA User Selected Data Tracking Utility



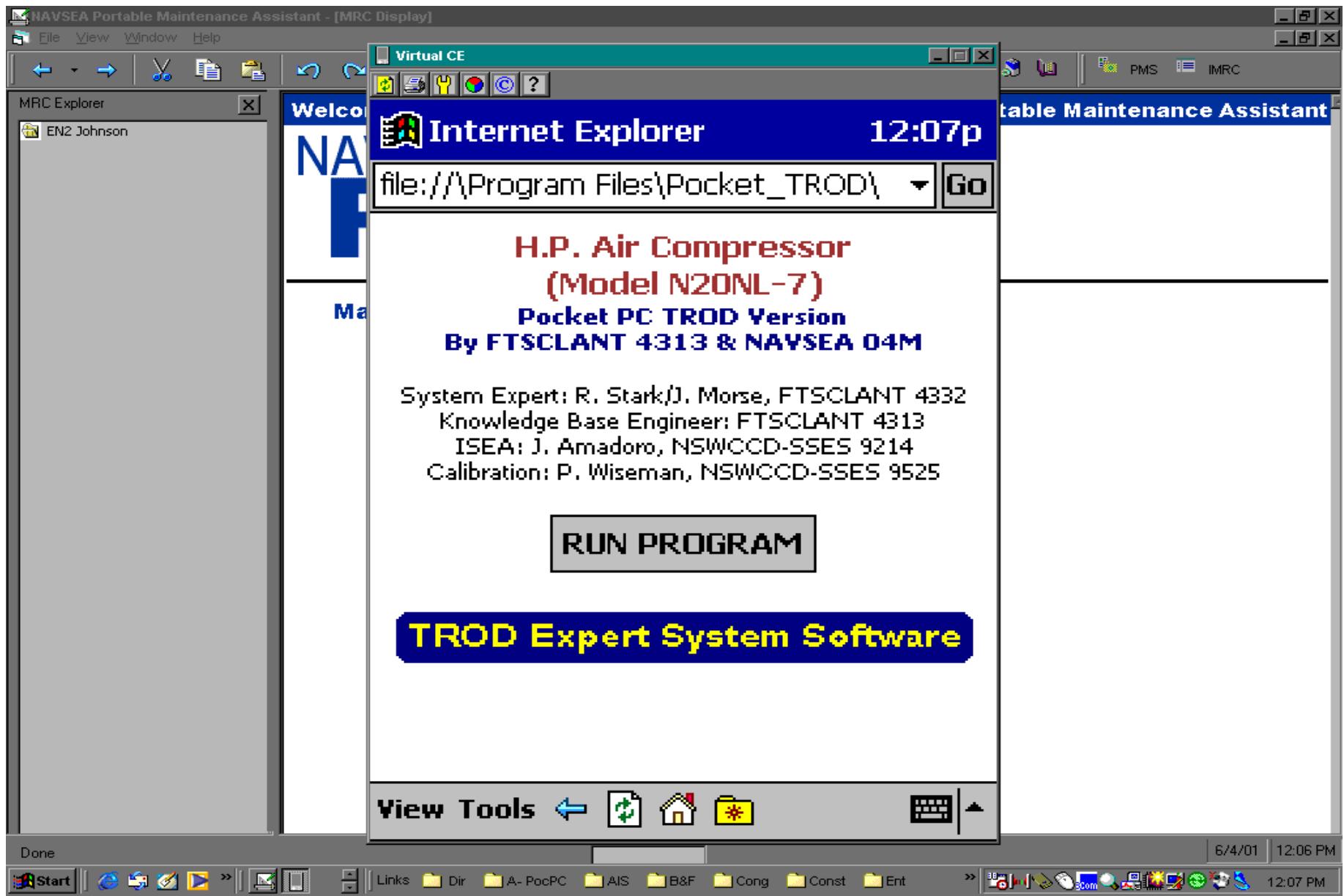


PocketPMA Graphing





PocketPMA TROD





PocketPMA

NAVOSH Manual

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OCCUPATIONAL SAFETY & HEALTH



UNITED STATES NAVY
DEPARTMENT OF DEFENSE
OPNAVINST 5100.19D

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Figure 23 NAVOSH Manual

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CHAPTER A1

INTRODUCTION

A0101. BACKGROUND

a. The Navy has conducted occupational safety and health programs for many years. These programs gained special prominence after passage of the Occupational Safety and Health Act (OSHA) in 1970. The primary thrust of the OSHA was directed at the private sector employer; however, Section 19 of the OSHA and several subsequent Presidential Executive Orders directed Federal agencies to establish and maintain occupational safety and health programs. Requirements for such programs are contained in Title 29, Code of Federal Regulations (CFR), Part 1960 (29 CFR 1960).

b. References A1-1 and A1-2 issued policy statements and outlined responsibilities for the

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Why PMAs ???

- **A tool to Bridge “the Longest Yard”**
 - Top side to machinery spaces
 - A technology solution for hard to navigate environment
- **Hardware**
 - Size - Getting smaller
 - Memory - Significant improvements in RAM and Storage
 - Displays - Color and better resolution
 - Battery - Significant improvements to battery life
- **Software**
 - Improvements to PDA Operating Systems
 - Availability of easy to use software development tools
 - Improved Hand writing and voice recognition technologies
- **Cost**
 - Affordable
- **Standards**
 - XML and 802.11b